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Determinants of Global Competitiveness of Chinese Economy

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Abstract

The Chinese economy has reached approximately average annual growth of 9% after economic reform era that began in 1978. This economic development miracle resulted from by exploiting the economic potential of internal factors in a complimentary external environment. Main aim of this study is to investigate the determinants of the global competitiveness of Chinese economy by considering economic development process of the Chinese economy and World Economic Forum the Global Competitiveness Index. It is vital to understand the determinants of global competitiveness for the Chinese economy in order to achieve sustainable economic development path in the highly competitive world economy conditions. The result of the study shows that the Chinese economy has strong global competitiveness indicators beside some problematic indicators. The Chinese economy is becoming more competitive by improving bottlenecks and structural problems. On the other hand the Chinese economy have to transform from cheap labour-intensive competitive advantage into high-tech innovative country with high qualified human capital in order to achieve sustainable economic growth in the long term.

Key words: *The Chinese Economy, Determinants of Global Competitiveness, Economic Growth*

JEL: F01, F12, F63

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1. Introduction

Chinese economy has expanded rapidly and has a steady growth despite the slowness in the global economy. Main macroeconomic indicators better than many other countries. I*n the past 30 years, China has achieved average annual growth of 9%, which is considered to be China's economic miracle. China's economic development is achieved by exploiting the economic potential of internal factors in a favourable external environment. The economic globalization process brought opportunities and development spaces for China since the 1980s. Chinese policy makers have seized the favourable strategic development period. Therefore, China's economic growth miracle is also a process of China's economic integration into the global economic system (Zhigang Yuan and Yuxin Yu, 2014:41-69).*

Main aim of this study is to investigate the determinants of the global competitiveness of Chinese economy by considering economic development process of the Chinese economy and World Economic Forum the Global Competitiveness Index. It is vital to understand the determinants of global competitiveness for the Chinese economy in order to achieve sustainable economic development path in the highly comepetitive world economy conditions.

2. Economic Development Dynamics of Chinese Economy

Naughton (2007:3) stated that the Chinese economy displays both unmatched dynamism and unrivaled complexity. Since the early 1980s, China has consistently the most rapidly growing economy on earth, sustaining an average annual growth rate of 10% from 1978 through 2005, according to official statistics. (see also, Nolan (2001), Wong and Lu (2002), Richardson (1999), Chuang and Thomas (2010), Yueh (2010), Cheung and De Haan (2013) and Suliman (1998))

China's progress during the economic reform era that began in 1978 has been one of the great economic success stories of the post-war era. China's performance is all the more remarkable in that its reforms have been gradual and its development has occurred despite extensive, though declining, state ownership and intervention in the economy. China has been liberalising its international trade and investment policies since the mid-1980s. As it has throughout the reform era, the realisation of China's economic potential, including the full benefits of trade and investment liberalisation, rests on its success in continuing and strengthening its domestic economic reforms.(OECD, 2002:5-6)

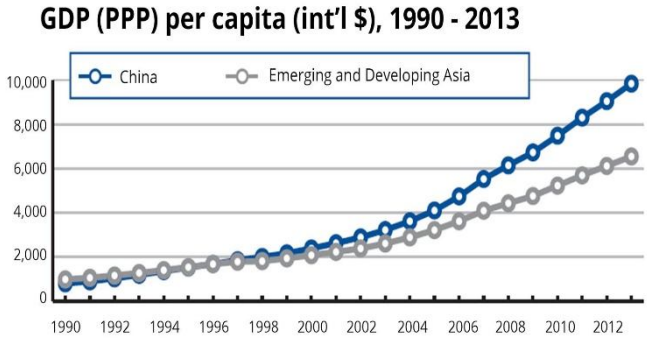
Zhigang Yuan and Yuxin Yu (2014) found that sources of economic growth, including labor supply, capital accumulation, and total factor productivity (TFP) growth, all tend to decline in the near future. It is likely that potential economic growth rate in China will fall significantly. To escape the "middle-income trap," structural adjustments of the Chinese economy should be made. Factor markets, including the capital market and land market, should be reformed so that institutional barriers that compress consumption can be eliminated and new liquidity can be injected into the Chinese economy. Besides, human capital investment should be further encouraged so that TFP growth can be promoted. China has weathered the global economic and financial crisis of the past five years better than virtually any OECD country and then many other emerging economies. It is well placed to enjoy a fourth decade of rapid catch-up and improving living standards (OECD, 2013:13)

China looks set to avoid the "middle-income trap". However, a shrinking workforce will depress potential growth, and the state-dominated economy will require reform if it is to deliver the productivity gains needed to enable China to catch up with most developed economies.(The Economist Intelligence Unit, 2014). *China has now overtaken the euro area and is on course to become the world's largest economy around 2016, after allowing for price differences. Living standards will continue to improve fast provided reforms are implemented. More recently, activity has regained momentum, helped by policy easing and a pick-up in infrastructure spending, but the global economic context remains fragile. (OECD, 2013:8).*

Table 1 shows the macroeconomic developments and prospects for the Chinese economy. The global economic and financial crisis that erupted in 2007 hit Chinese exports but swift policy action mitigated the impact on the economy. As a result, year-average growth remained above 9% in 2008-2010. However, in the face of overheating symptoms and sectoral imbalances, corrective action was undertaken in 2011, contributing to a slowdown that was amplified by a weakening and uncertain international environment, so much so that policy reversed gears around mid-2012. Growth troughed at 7.8% in 2012 and is set to regain momentum in 2013-14.

Insert Table I

Figure 1 shows GDP and population indicators for Chinese economy. GDP (ppp) per capita for the Chinese economy has been increasing strongly.



Key indicators, 2013

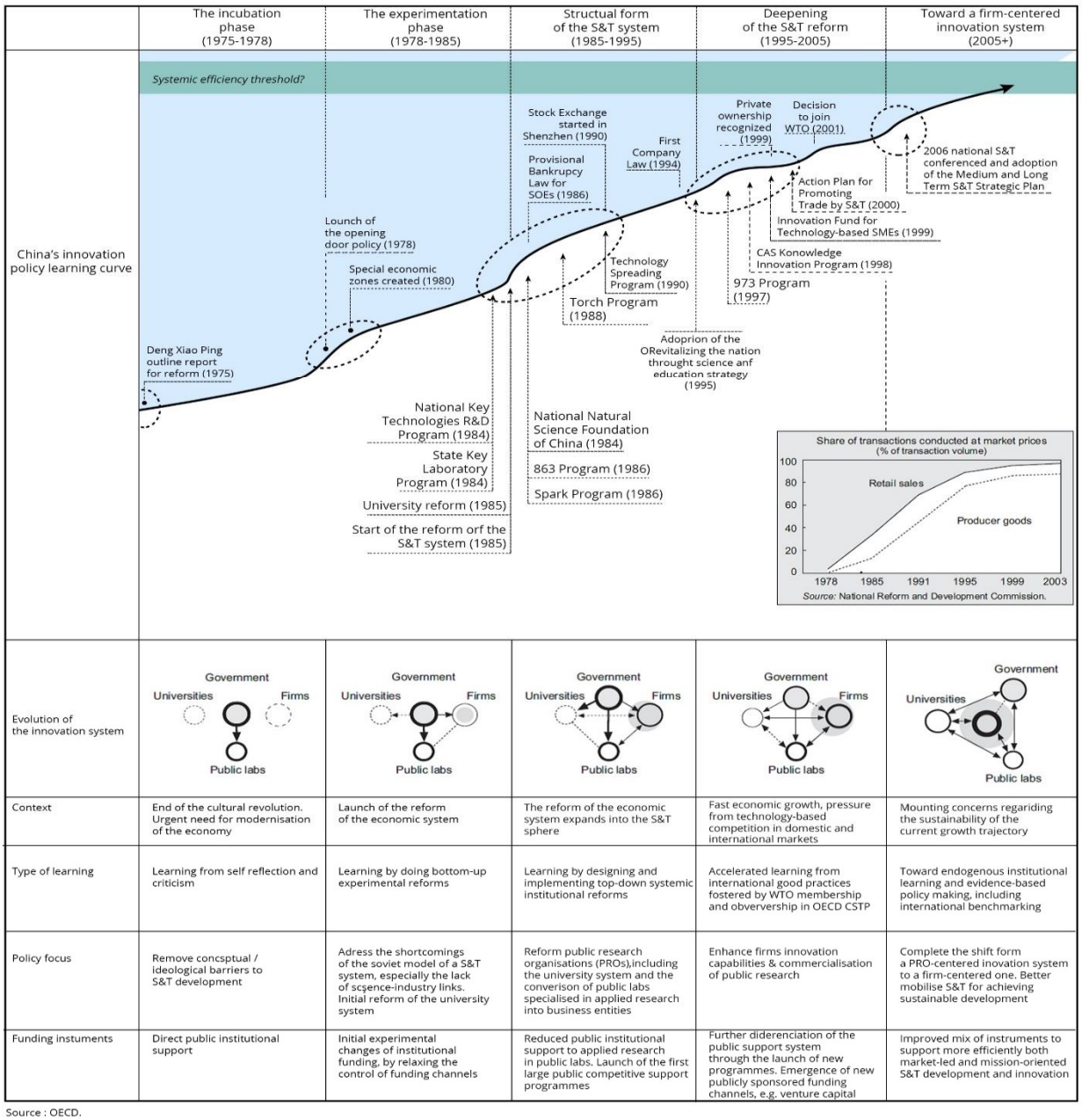
Population (millions)..... 1,360.8
GDP (US$ billions)..... 9,181.4
GDP per capita (US $).....6,747
GDP (PPP) as share (%) of world total.....15.40

Figure 1. GDP and Population Indicators for Chinese Economy

Source: Klaus Schwab (Edt). The Global Competitiveness Report 2014–2015, World Economic Forum, 2014

Insert Table II

Table 2 shows the growth accounting for the Chinese economy. *The contribution of total factor productivity gains to overall growth has steadily declined over the past three five-year periods.* (OECD, 2013)



Source : OECD.

Figure 2. China's innovation policy: institutional reform and learning curve.

Source: OECD (2008). Reviews of Innovation Policy CHINA Synthesis Report, OECD

3. Methodology and Application

One of the most important sources of the sustainble economic growth for a country is strong global competitiveness level of economy. World Economic Forum (2014:4) *defines competitiveness as the set of institutions, policies, and factors that determine the level of productivity of a country. The level of productivity, in turn, sets the level of prosperity that can be reached by an economy. The productivity level also determines the rates of return obtained by investments in an economy, which in turn are the fundamental drivers of its growth rates. In other words, a more competitive economy is one that is likely to grow faster over time.* Figure 3 shows the global competitiveness index framework and Table 3 shows the subindex weights and income thresholds for stages of development.

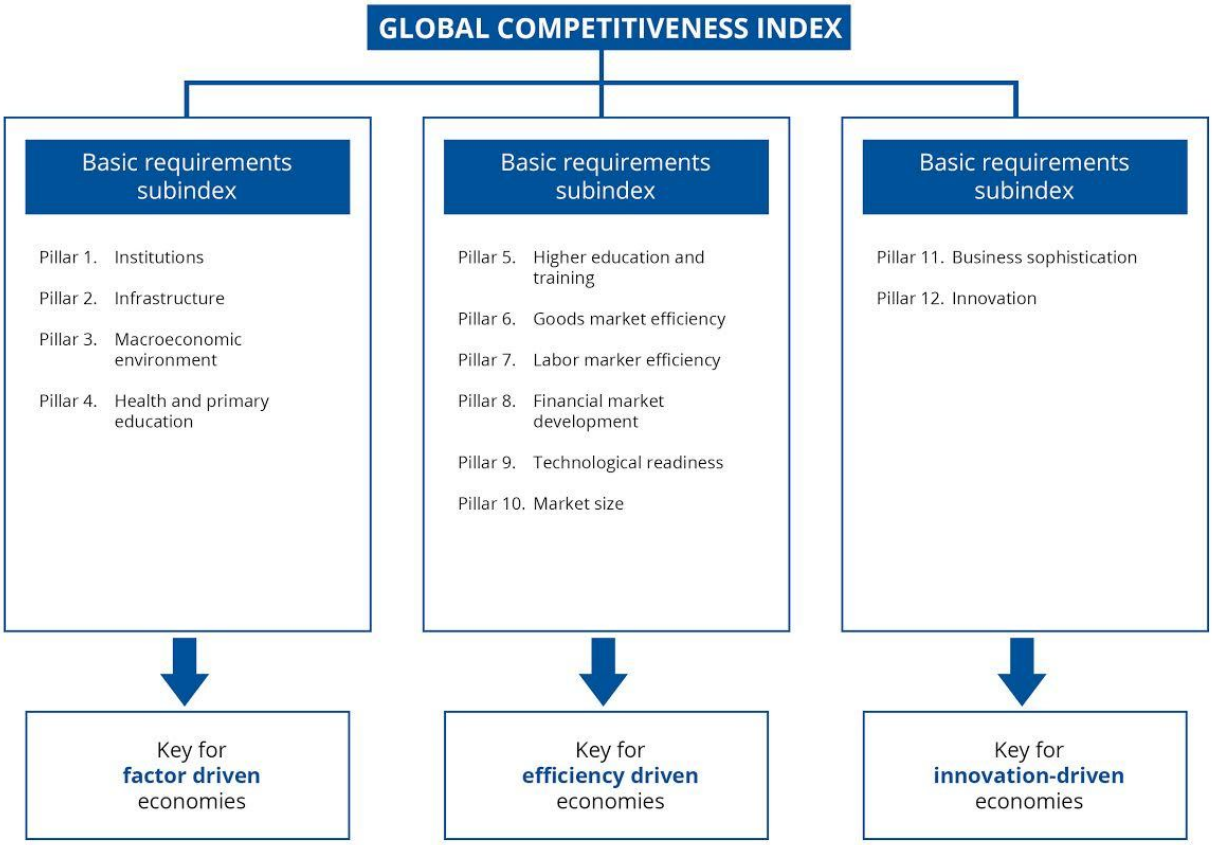


Figure 3. The Global Competitiveness Index Framework

Source: Klaus Schwab (Edt). The Global Competitiveness Report 2014–2015, World Economic Forum, 2014

Insert Table III

4. Analysis and the Results

Table 4 shows countries/economies at each stage of development according to threshold income level in Table 3. The Chinese economy is at stage 2, which means efficieny-driven economy phase, before the innovation-driven phase.

Insert Table IV

Table 5 shows the global competitiveness index 2014–2015 rankings and 2013–2014 comparisons. The rank of the Chinese economy is 28 for 2014–2015 ranking, whics is very important success for the Chinese economy.

Insert Table V

Table 6 shows global competitiveness index indicators for Chinese economy. The rank of the Chinese economy is 28 for 2014–2015 ranking and 26 for 2011–2012 ranking. The one of best competitiveness indicators is market size, the worst one is technological readiness. The Chinese economy have to improve the global competitiveness indicators which are not in good leveli in order to achieve sustainable economic growth path. Ljungwall and Gustavsson Tingvall (2014) *examined whether China has benefited more from spending on R&D than other countries. Their results suggest that the growth-enhancing effect of R&D spending in China has been significantly weaker than that of other countries. It is thus unlikely that R&D spending has been successful as a key contributing factor to economic growth in China.*

Insert Table VI

Figure 4 shows the stage of development and global competitiveness index indicators for Chinese economy. Stage of development is efficiency driven phase 2 for the Chinese economy. On the other hand, the Chinese economy is very strong global competitiveness indicators such as market size, macroeconomic environment, health and primary education considering the Emerging and Developing Asia countries. Global competitiveness level is vital for the sustainable economic growth. In this context the Chinese economy is strong enough to compete with her global competitors. However, the Chinese economy have to increase technological readiness and financial market development indicators.

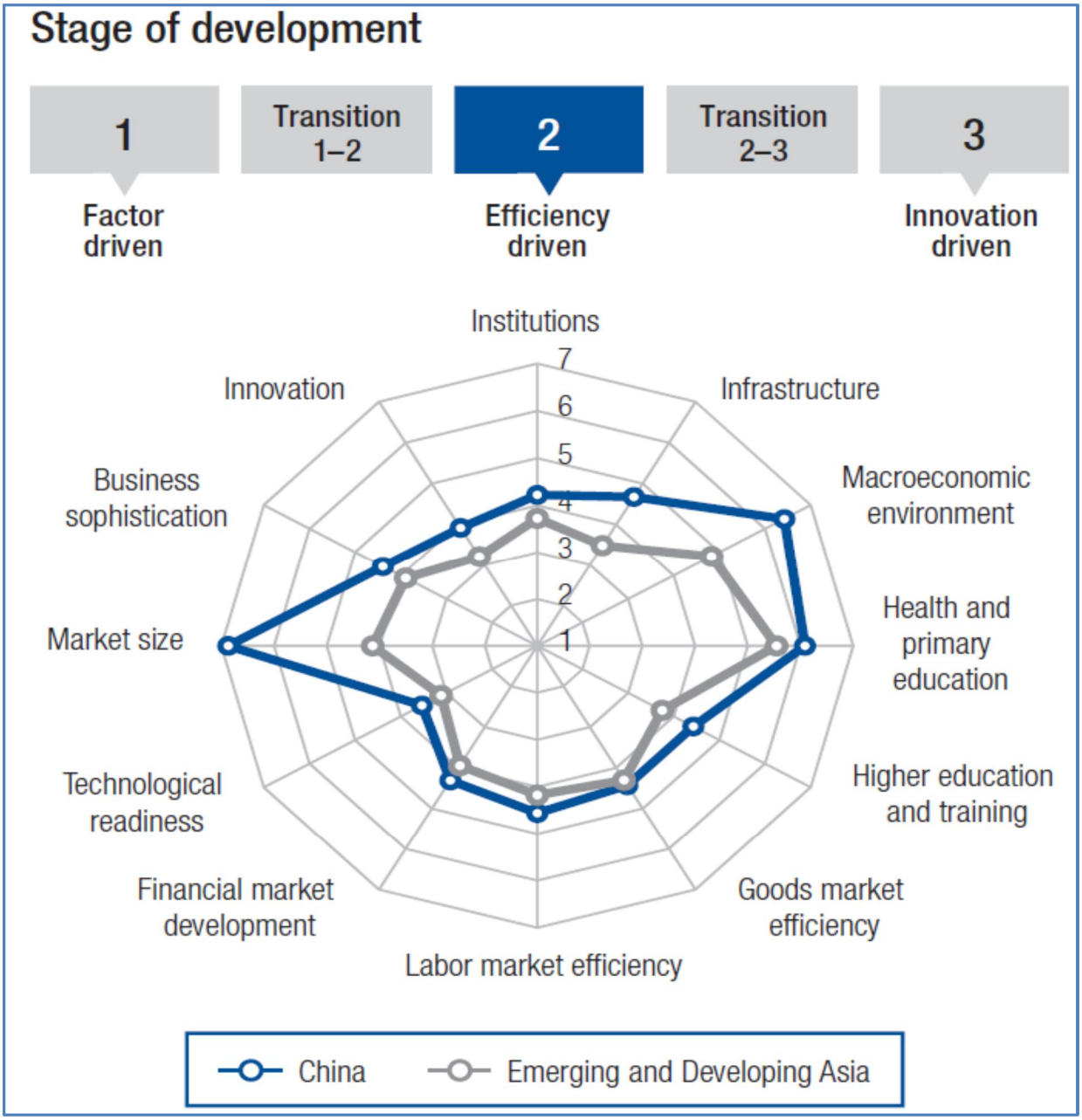
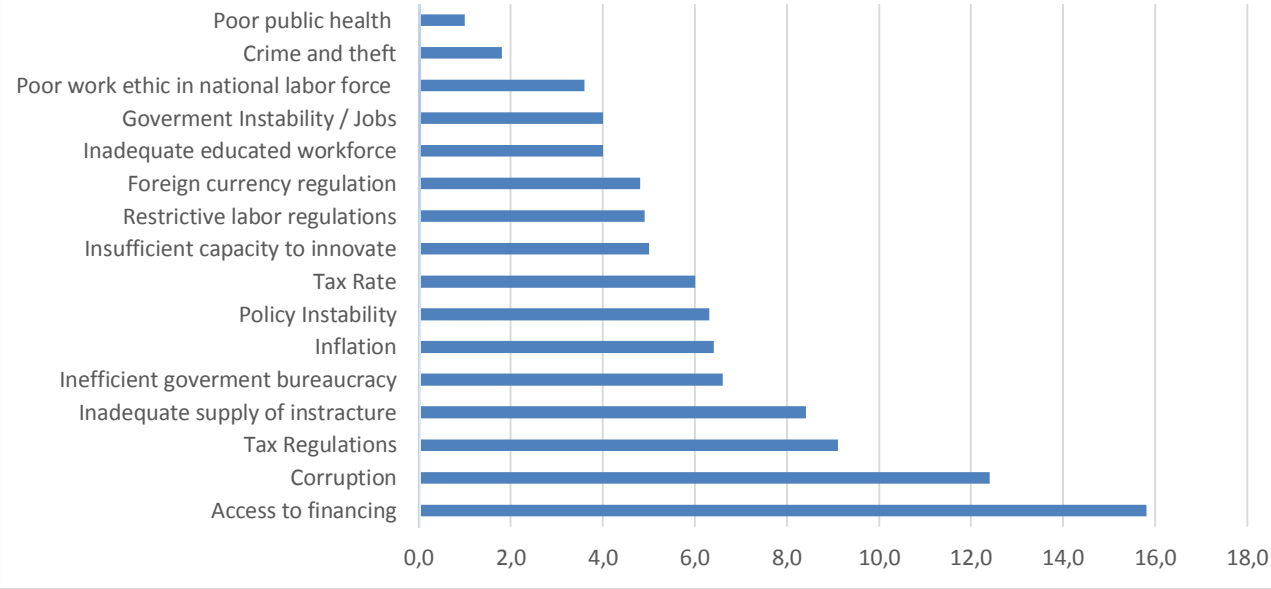


Figure 4. Stage of Development and Global Competitiveness Index Indicators for Chinese Economy

Source: Klaus Schwab (Edt). The Global Competitiveness Report 2014–2015, World Economic Forum, 2014

Table 7 shows the most problematic factors for doing business for Chinese economy and as follows respectively, access to financing, corruption, tax regulations, inadequate supply of infrastructure, inefficient government bureaucracy, inflation, policy instability, tax rates, insufficient capacity to innovate, restrictive labor regulations, foreign currency regulations, inadequately educated workforce, government instability/coups, poor work ethic in national labor force, crime and theft, poor public health.

Insert Table 7



Source: Klaus Schwab (Edt). The Global Competitiveness Report 2014–2015, World Economic Forum, 2014

Table 8 shows the global competitiveness index indicators in detail for Chinese economy 1-2. Global competitiveness indicators varies in terms of competitive advantage, some of the them are relatively advantageous as follows, institutions such as, public trust in politicians,favoritism in decisions of government officials, wastefulness of government spending, burden of government regulation, infrastructure such as available airline seat, macroeconomic environment such as gross national savings, inflation, general government debt, country credit rating , health and primary education, goods market efficiency, labor market efficiency,financial market development, market size, business sophistication and innovation, but others are relatively disadvantageous for the Chinese economy in the global competition structure.

Insert Table VIII

5. Conclusion

The Chinese economy has reached approximately average annual growth of 9% after economic reform era that began in 1978. This economic development miracle resulted from by exploiting the economic potential of internal factors in

a complimentary external environment. The economic liberalization and globalization provide opportunities for the Chinese economy since the 1980s. Chinese policy makers have seized the favourable strategic development period. On the other hand, the global economic and financial crisis that erupted in 2007 hit Chinese exports but swift policy action mitigated the impact on the economy. As a result, year-average growth remained above 9% in 2008-2010. However, in the face of overheating symptoms and sectoral imbalances, corrective action was undertaken in 2011, contributing to a slowdown that was amplified by a weakening and uncertain international environment, so much so that policy reversed gears around mid-2012. Growth troughed at 7.8% in 2012 and is set to regain momentum in 2013-14.

For the Chinese Economy, global competitiveness indicators varies in terms of competitive advantage, some of the them are relatively advantageous as follows, institutions such as, public trust in politicians,favoritism in decisions of government officials, wastefulness of government spending, burden of government regulation, infrastructure such as available airline seat, macroeconomic environment such as gross national savings, inflation, general government debt, country credit rating , health and primary education, goods market efficiency, labor market efficiency,financial market development, market size, business sophistication and innovation, but others are relatively disadvantageous for the Chinese economy in the global competition structure. The Chinese economy has strong global competitiveness indicators beside some problematic indicators. The Chinese economy is becoming more competitive by improving bottlenecks and structural problems. On the other hand the Chinese economy have to transform from cheap labour-intensive competitive advantage into high-tech innovative country with high qualified human capital in order to achieve sustainable economic growth in the long term.

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Table 1. Macroeconomic Developments and Prospects

	2007	2008	2009	2010	2011	2012	2013	2014
				% change				
Real GDP	14.2	9.6	9.2	10.4	9.3	7.8	8.5	8.9
Consumption (households and government)	10.8	8.4	9.2	9.0	10.5	8.2	8.5	8.7
Investment (fixed capital and inventories)	14.3	10.6	18.9	11.8	9.6	8.3	8.5	8.9
Total domestic demand	12.3	9.4	13.6	10.3	10.1	8.2	9.0	9.8
Exports	19.8	8.5	-10.2	27.6	8.1	5.1	9.4	10.9
Imports	13.7	4.0	4.5	20.6	8.8	6.3	10.4	11.5
				Percentage point contributions to changes in GDP				
Consumption (households and government)	5.6	4.2	4.6	4.5	5.2	4.1	4.3	4.5
Investment	6.0	4.5	8.1	5.5	4.5	3.9	4.0	4.1
Foreign trade (including statistical discrepancy)	2.6	0.9	-3.5	0.4	-0.4	-0.2	0.2	0.4
of which								
Foreign trade(1)	3.6	2.3	-5.7	3.6	0.4	0.0	0.4	0.6
Statistical discrepancy(2)	-1.0	-1.4	2.2	-3.2	-0.8	-0.2	-0.2	-0.2
				% change				
GDP deflator	7.5	8.0	-0.8	6.6	7.8	1.9	2.5	2.7
Consumer price index	4.8	5.9	-0.7	3.2	5.5	2.6	2.7	2.9
Terms of trade	-1.0	-5.3	8.7	-9.6	-3.4	3.0	-0.1	-1.0

				% of GDP				
Fiscal balance(3)	2.0	0.9	-1.1	-0.7	0.1	-0.4	-1.0	-0.7

1.Estimated using price indices for the export and import of goods.

2.Estimated as a residual.

3.Sum of the balance of the national government and the social security system.

4.Price index for the second-hand market, covering four of the five largest cities in 2007-08 and ten of the largest 13 thereafter. Average prices have been weighted by the estimated value of the housing stock in each city.

Source: OECD (2013). Economic Surveys CHINA, OECD

Table 2. Growth accounting (1) (Average annual rate of change, in per cent)

	1996-2001	**2001-06**	**2006-11**
Actual growth			
Capital	10.5	12.9	13.9
Labour	1.3	3.4	2.8
Output	8.9	10.9	10.7
Contribution to growth			
Capital	5.3	6.5	6.9
Labour	0.6	1.7	1.4
Productivity	3.0	2.8	2.3
Share of growth			
Capital	59.0	59.1	65.0
Labour	7.2	15.3	13.1
Productivity	33.8	25.5	21.8

1. For output outside agriculture and housing (as the output of the housing sector is poorly measured in Chinese national accounts), figures are calculated from log differences multiplied by 100.

Source: OECD (2013). Economic Surveys CHINA, OECD

The main sources of economic growth in the the Chinese economy are capital and total factor productivity. In this context, it is vital the innovation policy. Figure 2 shows China's innovation policy, institutional reform and learning curve. Innovatiın system in the Chinese economy transformed from state-centered phase into firm-centered system.

Table 3. Subindex Weights and Income Thresholds for Stages of Development

Stageof Development →	Stage 1: Factor-driven	Transition fromStage 1 to stage 2	Stage 2:Efficiency-driven	Transition fromStage 2 to stage 3	Stage 3: Innovation-driven
GDPper capita (US$) thresholds*	<2,000	2,000–2,999	3,000–8,999	9,000–17,000	>17,000
Weight for basic requirements	60%	40–60%	40%	20–40%	20%
Weight for efficiency enhancers	35%	35–50%	50%	50%	50%
Weight for innovation and sophistication factors	5%	5–10%	10%	10–30%	30%

Note: See individual country/economy profiles for the exact applied weights.

For economies with a high dependency on mineral resources, GDPper capita is not the sole criterion for the determination of the stage of development. See text for details.

Source: Klaus Schwab (Edt). The Global Competitiveness Report 2014–2015, World Economic Forum, 2014

Table 4. Countries/Economies at Each Stage of Development

Stage 1: Factor-driven (37 economies)	Transition from stage 1 to stage 2 (16 economies)	Stage 2: Efficiency-driven (30 economies)	Transition from stage 2 to stage 3 (24 economies)	Stage 3: Innovation-driven
Bangladesh	Algeria	Albania	Argentina	Australia
Burkina Faso	Angola	Armenia	Bahrain	Austria
Burundi	Azerbaijan	Bulgaria	Barbados	Belgium
Cambodia	Bhutan	Cape Verde	Brazil	Canada
Cameroon	Bolivia	China	Chile	Cyprus
Chad	Botswana	Colombia	Costa Rica	Czech Republic
Côte d'Ivoire	Gabon	Dominican Republic	Croatia	Denmark
Ethiopia	Honduras	Egypt	Hungary	Estonia
Gambia, The	Iran, Islamic Rep.	El Salvador	Kazakhstan	Finland
Ghana	Kuwait	Georgia	Latvia	France
Guinea	Libya	Guatemala	Lebanon	Germany
Haiti	Moldova	Guyana	Lithuania	Greece
India	Mongolia	Indonesia	Malaysia	Hong Kong SAR
Kenya	Philippines	Jamaica	Mauritius	Iceland
Kyrgyz Republic	Saudi Arabia	Jordan	Mexico	Ireland
Lao PDR	Venezuela	Macedonia, FYR	Oman	Israel
Lesotho		Montenegro	Panama	Italy
Madagascar		Morocco	Poland	Japan
Malawi		Namibia	Russian Federation	Korea, Rep.
Mali		Paraguay	Seychelles	Luxembourg
Mauritania		Peru	Suriname	Malta
Mozambique		Romania	Turkey	Netherlands
Myanmar		Serbia	United Arab Emirates	New Zealand
Nepal		South Africa	Uruguay	Norway
Nicaragua		Sri Lanka		Portugal
Nigeria		Swaziland		Puerto Rico
Pakistan		Thailand		Qatar
Rwanda		Timor-Leste		Singapore
Senegal		Tunisia		Slovak Republic
Sierra Leone		Ukraine		Slovenia
Tajikistan				Spain
Tanzania				Sweden
Uganda				Switzerland
Vietnam				Taiwan, China
Yemen				Trinidad and Tobago
Zambiaimbabwe				

Unt Kingdom

Source: Klaus Schwab (Edt). The Global Competitiveness Report 2014–2015, World Economic Forum, 2014

Table 5. The Global Competitiveness Index 2014–2015 Rankings and 2013–2014 Comparisons

Country/ Economy	Rank (out of 144)	Score (1–7)	Rank among 2013–2014	GCI 2013–2014 rank
Switzerland	1	5.70	1	1
Singapore	2	5.65	2	2
United States	3	5.54	3	5
Finland	4	5.50	4	3
Germany	5	5.49	5	4
Japan	6	5.47	6	9
Hong Kong SAR	7	5.46	7	7
Netherlands	8	5.45	8	8
United Kingdom	9	5.41	9	10
Sweden	10	5.41	10	6
Norway	11	5.35	11	11
United Arab Emirates	12	5.33	12	19
Denmark	13	5.29	13	15
Taiwan, China	14	5.25	14	12
Canada	15	5.24	15	14
Qatar	16	5.24	16	13
New Zealand	17	5.20	17	18
Belgium	18	5.18	18	17
Luxembourg	19	5.17	19	22
Malaysia	20	5.16	20	24
Austria	21	5.16	21	16
Australia	22	5.08	22	21
France	23	5.08	23	23
Saudi Arabia	24	5.06	24	20
Ireland	25	4.98	25	28
Korea, Rep.	26	4.96	26	25
Israel	27	4.95	27	27

China	28	4.89	28	29
Estonia	29	4.71	29	32
Iceland	30	4.71	30	31

Source: Klaus Schwab (Edt). The Global Competitiveness Report 2014–2015, World Economic Forum, 2014

Table 6. Global Competitiveness Index Indicators for Chinese Economy

	Rank (out of 144)	**Score (1-7)**
G C I 2014–2015	28	4,9
GCI 2013–2014 (out of 148)	29	4,8
GCI 2012–2013 (out of 144)	29	4,8
GCI 2011–2012 (out of 142)	26	4,9
Basic requirements (40.0%).	**28**	**5,3**
Institutions	47	4,2
Infrastructure	46	4,7
Macroeconomic environment	10	0,4
Health and primary education	46	6,1
Efficiency enhancers (50.0%)	**30**	**4,7**
Higher education and training	60	4,4
Goods market efficiency	56	4,4
Labor market efficiency	37	4,6
Financial market development	54	4,3
Technological readiness	83	3,5
Market size	2	6,9
Innovation and sophistication factors (10.0%)	**33**	**4,1**

Business sophistication	43	4,4
Innovation	32	3,9

Source: Klaus Schwab (Edt). The Global Competitiveness Report 2014–2015, World Economic Forum, 2014

Table 7. The Most Problematic Factors for Doing Business for Chinese Economy

Access to financing	15,8
Corruption	12,4
Tax Regulations	9,1
Inadequate supply of instracture	8,4
Inefficient goverment bureaucracy	6,6
Inflation	6,4
Policy Instability	6,3
Tax Rate	6,0
Insufficient capacity to innovate	5,0
Restrictive labor regulations	4,9
Foreign currency regulation	4,8
Inadequate educated workforce	4,0
Goverment Instability / Jobs	4,0
Poor work ethic in national labor force	3,6
Crime and theft	1,8
Poor public health	1,0

Table 8. The Global Competitiveness Index Indicators in detail for Chinese Economy

	Value	Rank / 144
1st pillar: Institutions		
1.01 Property rights	4,5	50
1.02 Intellectual property protection	4,0	53
1.03 Diversion of public funds	3,9	45
1.04 Public trust in politicians.	4,1	26
1.05 Irregular payments and bribes	4,0	66
1.06 Judicial independence	4,0	60
1.07 Favoritism in decisions of government officials	4,1	22
1.08 Wastefulness of government spending	4,1	24
1.09 Burden of government regulation	4,1	19
1.10 Efficiency of legal framework in settling disputes .	4,1	49
1.11 Efficiency of legal framework in challenging regs.	3,6	47
1.12 Transparency of government policymaking.	4,5	33
1.13 Business costs of terrorism	5,0	85
1.14 Business costs of crime and violence	4,8	52
1.15 Organized crime	4,7	70
1.16 Reliability of police services .	4,3	61
1.17 Ethical behavior of firms	4,2	55
1.18 Strength of auditing and reporting standards	4,4	82
1.19 Efficacy of corporate boards	4,5	78
1.20 Protection of minority shareholders' interests .	4,1	67
1.21 Strength of investor protection, 0–10 (best)*	5,0	83

2nd pillar: Infrastructure			
2.01	Quality of overall infrastructure	4,4	64
2.02	Quality of roads	4,6	49
2.03	Quality of railroad infrastructure	4,8	17
2.04	Quality of port infrastructure .	4,6	53
2.05	Quality of air transport infrastructure	4,7	58
2.06	Available airline seat km/week, millions*	14163,0	2
2.07	Quality of electricity supply.	5,2	56
2.08	Mobile telephone subscriptions/100 pop.*	88,7	108
2.09	Fixed telephone lines/100 pop.*.	19,3	59
3rd pillar: Macroeconomic environment			
3.01	Government budget balance, % GDP*.	-1,9	50
3.02	Gross national savings, % GDP*	50,0	5
3.03	Inflation, annual % change*	2,6	1
3.04	General government debt, % GDP*	22,4	22
3.05	Country credit rating, 0–100 (best)*	77,5	25
4th pillar: Health and Primary Education			
4.01	Malaria cases/100,000 pop.* .	0,5	15
4.02	Business impact of malaria	5,0	32
4.03	Tuberculosis cases/100,000 pop.*	73,0	84
4.04	Business impact of tuberculosis	4,9	96
4.05	HIV prevalence, % adult pop.*	< 0,1	1
4.06	Business impact of HIV/AIDS .	5,0	88

4.07	Infant mortality, deaths/1,000 live births*	12,1	62
4.08	Life expectancy, years*.	75,2	53
4.09	Quality of primary education	4,2	59
4.10	Primary education enrollment, net %*	99,9	4
5th pillar: Higher Education and Training			
5.01	Secondary education enrolment, gross %*.	89,9	72
5.02	Tertiary education enrolment, gross %*	26,7	85
5.03	Quality of the education system .	4,0	52
5.04	Quality of math and science education	4,3	56
5.05	Quality of management schools .	3,9	85
5.06	Internet access in schools	5,3	38
5.07	Availability of research and training services .	4,4	58
5.08	Extent of staff training .	4,3	46
6th pillar: Goods Market Efficiency			
6.01	Intensity of local competition	5,4	44
6.02	Extent of market dominance .	4,3	29
6.03	Effectiveness of anti-monopoly policy.	4,5	38
6.04	Effect of taxation on incentives to invest.	4,0	44
6.05	Total tax rate, % profits*	63,7	131
6.06	No. procedures to start a business*	13,0	135
6.07	No. days to start a business*	33,0	116
6.08	Agricultural policy costs.	4,7	11
6.09	Prevalence of trade barriers .	4,5	54

6.10	Trade tariffs, % duty*	11,1	115
6.11	Prevalence of foreign ownership.	4,5	71
6.12	Business impact of rules on FDI.	5,0	26
6.13	Burden of customs procedures.	4,3	55
6.14	Imports as a percentage of GDP*	24,8	130
6.15	Degree of customer orientation	4,5	70
6.16	Buyer sophistication.	4,3	18
7th pillar: Labor market efficiency			
7.01	Cooperation in labor-employer relations .	4,4	58
7.02	Flexibility of wage determination	4,8	84
7.03	Hiring and firing practices.	4,6	15
7.04	Redundancy costs, weeks of salary*	27,4	120
7.05	Effect of taxation on incentives to work	4,0	36
7.06	Pay and productivity.	4,8	15
7.07	Reliance on professional management	4,6	43
7.08	Country capacity to retain talent	4,2	31
7.09	Country capacity to attract talent	4,2	27
7.10	Women in labor force, ratio to men*	0,84	60
8th pillar: Financial Market Development			
8.01	Availability of financial services	4,5	63
8.02	Affordability of financial services	4,4	50
8.03	Financing through local equity market	4,2	34

8.04	Ease of access to loans	3,7	21
8.05	Venture capital availability.	3,9	13
8.06	Soundness of banks	5	63
8.07	Regulation of securities exchanges	4,4	58
8.08	Legal rights index, 0–10 (best)*	5	85
9th pillar: Technological Readiness			
9.01	Availability of latest technologies	4,3	97
9.02	Firm-level technology absorption.	4,7	68
9.03	FDI and technology transfer	4,5	81
9.04	Individuals using Internet, %*	45,8	75
9.05	Fixed broadband Internet subscriptions/100 pop.*	13,6	51
9.06	Int'l Internet bandwidth, kb/s per user*	4,2	120
9.07	Mobile broadband subscriptions/100 pop.*	21,4	78
10th pillar: Market size			
10.01	Domestic market size index, 1–7 (best)*	6,8	2
10.02	Foreign market size index, 1–7 (best)*	7	1
10.03	GDP (PPP$ billions)*	13.395,40	2
10.04	Exports as a percentage of GDP*	26,3	109
11th pillar: Business Sophistication			
11.01	Local supplier quantity	5,1	24
11.02	Local supplier quality	4,5	63
11.03	State of cluster development	4,6	25

11.04	Nature of competitive advantage	3,9	45
11.05	Value chain breadth	4,3	37
11.06	Control of international distribution	4,5	31
11.07	Production process sophistication	4,1	56
11.08	Extent of marketing	4,5	52
11.09	Willingness to delegate authority	3,9	49

12th pillar: Innovation

12.01	Capacity for innovation	4,2	40
12.02	Quality of scientific research institutions .	4,3	39
12.03	Company spending on R&D.	4,3	23
12.04	University-industry collaboration in R&D .	4,4	32
12.05	Gov't procurement of advanced tech products	4,3	10
12.06	Availability of scientists and engineers	4,4	43
12.07	PCT patents, applications/million pop.*	11,7	34

Source: Klaus Schwab (Edt). The Global Competitiveness Report 2014–2015, World Economic Forum, 2014